

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the reasons that follow. Claims 1-9 remain pending in this application.

Claim Rejections under 35 U.S.C. § 112

Claims 1-9 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Specifically, the Office Action asserts that the limitation comparing the calculated difference with a predetermined threshold was not described in the specification. Applicant respectfully disagrees.

Applicant refers the Examiner to page 9, lines 10-14 of the application as filed which states “the reception field level difference comparing part 34 of the radio base station control apparatus 30 compares the difference between the initial reception field levels L(A0) and L(B0), which is obtained at step S5, with a threshold value T that is designated in advance for the reception field level difference comparing part 34 (step S6)” (emphasis added).

Accordingly, Applicant requests that the rejection be withdrawn and claims 1-9 be allowed.

Claim Rejections under 35 U.S.C. § 103

Claims 1-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2006/0094432 (“Chang”) in view of U.S. Patent Publication No. 2006/0068826 (“Leonard”) and U.S. Patent No. 6,496,493 (“Chung”). In response, Applicant traverses the rejection for the reasons set forth below.

Applicant relies on MPEP § 2143.03, which requires that all words in a claim must be considered in judging the patentability of that claim against the prior art. Here, the cited references do not identically disclose, teach or suggest all the claim limitations. *See In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Independent claim 1 is directed to a “method for testing a handover function between cells covered by a plurality of base station radio apparatuses in a mobile communication

system" comprising, in addition to other steps, "comparing the calculated difference with a predetermined threshold value; if the calculated difference is greater than the predetermined threshold: controlling transmission power of one of the two of the plurality of base station radio apparatuses so that the difference becomes equal to or smaller than the predetermined threshold value; and performing a handover function test between cells covered by the two of the plurality of base station radio apparatuses" (Emphasis added). Independent claims 4 and 7 recite similar limitations.

Without limitation to the claims, the Examiner is referred to Figs. 1 and 2 of the application as filed. When the mobile terminal 10 receives signals from the base station radio apparatuses 20a and 20b, the reception power determining part 12 of the mobile terminal 10 measures the initial reception powers of the mobile terminal 10 for the individual signals transmitted by the base station radio apparatuses 20a and 20b (step S2). According to an exemplary embodiment, the transmission powers of the base station radio apparatuses 20a and 20b are P(A0) and P(B0), and the initial reception powers of the mobile terminal 10 for the signals transmitted by the base station radio apparatuses 20a and 20b are L(A0) and L(B0). Then, the reception field level difference calculating part 33 of the radio base station control apparatus 30 calculates a difference between the initial reception field levels L(A0) and L(B0) identified at step S4 (step S5).

According to an exemplary embodiment, the relation of the initial reception field level L(A0) and L(B0) is established as L(A0)>L(B0). Accordingly, the radio base station control apparatus 30 selects, as a line for communication with the mobile terminal 10; the base station radio apparatus 20a that supplies the initial reception field level L(A0), which is the highest initial reception field level at the mobile terminal 10. The reception field level difference comparing part 34 of the radio base station control apparatus 30 compares the difference between the initial reception field levels L(A0) and L(B0), which is obtained at step S5, with a threshold value T that is designated in advance for the reception field level difference comparing part 34 (step S6). According to an exemplary embodiment, when $L(A0)-L(B0) \leq T$ is established, the base station radio apparatus 20b that supplies the initial

reception field level L(B0) is also selected as a line for communication with the mobile terminal 10.

In contrast, when $L(A0)-L(B0)>T$, the radio base station control apparatus 30 does not select, as a line for communication with the mobile terminal 10, the base station radio apparatus 20b that supplies the initial reception field level $L(B0)$. In this exemplary embodiment, in order to test the soft handover function between the cells that are covered by the base station radio apparatuses 20a and 20b, $L(A0)-L(B0)\leq T$ is required. Accordingly, the adjusted value calculating part 35 of the radio base station control apparatus 30 calculates such an adjusted value ΔL such that $L(A0)-L(B0)-\Delta L\leq T$ (step S7).

Sequentially, the transmission power control value calculating part 36 of the radio base station control apparatus 30 calculates such a transmission power control value that the value of the transmission power of the base station radio apparatus 20a is lower than $P(A0)$ by the adjusted value ΔL (step S8). Accordingly, $P(A1)$, that is, $P(A0)-\Delta L$ is set for the transmission power of the base station radio apparatus 20a under the control of the transmission power control part 37, of the radio base station control apparatus 30, based on the transmission power control value (step S9). As a result, the levels at the mobile terminal 10 of the reception fields for the base station radio apparatuses 20a and 20b are $L(A1)$ and $L(B0)$.

In this exemplary embodiment, the mobile terminal 10 notifies the radio base station control apparatus 30, through the base station radio apparatuses 20a and 20b, that $L(A1)$ and $L(B0)$ are the reception powers for the cells for which the soft/softer handover function test is to be performed. The radio base station control apparatus 30 selects the base station radio apparatus 20b as a line for communication with the mobile terminal 10. Accordingly, the base station radio apparatus 20b that could not be set to the soft/softer handover state is automatically designated for the soft/softer handover state.

In contrast, the cited references do not disclose, teach or suggest each and every element recited in independent claims 1, 4 and 7.

Chang describes a method of performing handoff in a mobile communication system. (*See, e.g.*, abstract and paragraphs [0002], [0016], and [0017]). More particularly, Chang describes a method of obtaining signal strength measurements associated with a base station from a mobile device and comparing the measured signal strength to a first threshold. (*See, e.g.*, paragraphs [0016], [0017], and [0022]). If the measured signal strength is less than the threshold, the strength of a neighboring base station is determined in order to determine a candidate base station to conduct a handoff with. (*See, e.g.*, paragraphs [0016], [0017], and [0022]). Accordingly, Chang basically teaches handing off from an active base station to a candidate base station if a measured signal strength is below a threshold.

However, as is acknowledged on page 4 of the Office Action, Chang does not disclose teach or suggest “if the calculated difference is greater than the predetermined threshold: controlling transmission power of one of the two of the plurality of base station radio apparatuses so that the difference becomes equal to or smaller than the predetermined threshold value; and performing a handover function test between cells covered by the two of the plurality of base station radio apparatuses” as claimed in claim 1. To cure the deficiencies of Chang, the Examiner relies on Leonard and Chung. Applicant respectfully disagrees.

The Office Action asserts that the abstract, and paragraphs 8-9, 24 and 27 of Leonard disclose “controlling transmission power of one of the two of the plurality of base station radio apparatuses” as claimed. Instead, Leonard discloses attempting to control the transmission power of each mobile phone to a minimum power level. See ¶¶ 24 (“Therefore, each base station typically includes an inner power control and an outer loop power control that attempt to control the transmission power of each mobile phone to a minimum power level...”). However, controlling the transmission power of a mobile phone is not identical to “controlling transmission power of one of the two of the plurality of base station radio apparatuses” as claimed in claim 1. That is, Leonard is directed to controlling the transmission power of mobile phones while, in contrast, the claims recite controlling the transmission power of base stations. Accordingly, Leonard fails to cure the deficiencies of Chang.

In addition, the Office Action asserts that Col. 3, lines 19-25 of Chung discloses “receiving a plurality of reception power levels measured by the mobile station, wherein each of the plurality of reception powers levels is associated with a different one of the plurality of base station radio apparatuses” as claimed in claim 1. As claimed above, the mobile station measures reception power levels, which is different from the transmission power levels of a base station. The passages cited in Chung discuss measuring the power strength of base stations. See e.g., Col. 3, lines 21-22 (“a first step of measuring and storing a pilot power strength (pilot_A) of a base station...”) However, measuring the power strength of base stations is not identical to “reception power levels measured by the mobile station” as claimed in claim 1. Accordingly, Chung fails to cure the deficiencies of Chang and Leonard.

Further, none of the cited references, in any combination, disclose, teach or suggest “performing a handover function test between cells covered by the two of the plurality of base station radio apparatuses” as claimed in claim 1. Further, the referenced limitations are not discussed in any detail in the Office Action. Since the Federal Circuit has stated that “obviousness requires a suggestion of all limitations in a claim,” Applicant respectfully submits that the Examiner has not properly set forth a *prima facie* case of obviousness. *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). (Emphasis added).

When determining whether a claim is obvious, an examiner must make “a searching comparison of the claimed invention – *including all its limitations* – with the teaching of the prior art.” *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, “obviousness requires a suggestion of all limitations in a claim.” *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). Here, the cited references fail to disclose each and every limitation in as complete detail as is contained in independent claims 1, 4 and 7.

If this rejection of the claims is maintained, the examiner is respectfully requested to point out where the above-mentioned features are disclosed in the cited references.

Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. § 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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